Conceptual and research frameworks for the economics of child labour and its elimination

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1. Introduction and background

Child labour has risen to the top of the policy agenda in the past decade. It is widely condemned, and there have been numerous declarations and conventions in the international arena on the need to eliminate child labour. This includes ILO Conventions on the Elimination of Child Labour, the ILO Declaration on Fundamental Principles and Rights at Work and the UNICEF Declaration on the Rights of Children. National policies have followed, one indication being that 37 countries had joined ILO’s IPEC (International Programme for the Elimination of Child Labour) by mid 1999; and another 31 countries were preparing to join IPEC (ILO, IPEC, June 1999).

In developing countries, child labour is often very hard on children, but necessary for family survival. Despite universal agreement that child labour should be eliminated, reality intervenes, and many children work. Many work long hours and in hazardous conditions in lower income countries. Minimum age laws and compulsory education laws are insufficient, in and of themselves, to eliminate child labour, including unacceptable forms of child labour in many developing countries.

Notwithstanding this international consensus on the need to eliminate child labour, especially hazardous and other worst forms, there is also widespread agreement that some aspects of work done by children can be good for children under the right circumstances. Non-hazardous work can teach, for example, self-reliance and responsibility. Indeed, in developed countries, many children work (generally to support their own consumption), doing service sector jobs, delivering newspapers and babysitting; many others help part-time on their family farm/business.

Children and their families are not the only ones affected by child labour. A variety of actors and institutions are affected by child labour. This includes, in addition to children and their families: communities, employers, industries, labour markets, national economies and international trade. For example, some employers and industries benefit from the use of child labour, since children are low cost and compliant workers. In contrast, low skilled adult workers are hurt by child labour, since child labour increases the supply of unskilled workers, which in turn reduces unskilled wage rates and adult employment opportunities. There is clearly a need to consider how the elimination of child labour would affect a wide-range of institutions and actors.

It is the contention of this paper that child labour policies, programmes, and research have been much too simplistic, and a lack of attention to the economics of child labour as well as to the complexity of child labour has retarded the identification of appropriate and effective policies for the elimination of unacceptable forms of child labour. For this reason, the following questions are addressed in this paper:

· What is child labour and why the concern?
· If child labour were eliminated, who would benefit economically and who would lose?
· How would economic benefits and losses accompanying the elimination of child labour vary over time and across actors and institutions?
· What are the policy implications of an economic analysis of the elimination of child labour?
· What types of research are needed on the economics of child labour?
One purpose of this paper is to develop conceptual and research frameworks for understanding the economics of child labour by taking into consideration that the economic benefits and costs from the elimination of child labour are influenced by the fact that there are: (i) various forms of child labour; (ii) several possible justifications for eliminating child labour; and (iii) a range of institutions and actors affected. In this way, it is hoped to improve our understanding of the economic determinants and consequences of child labour and so better enable policy-makers to devise effective policies to eliminate hazardous and other worst forms of child labour as well as improve lives, especially those of children and poor families. Throughout this paper, policy implications are drawn and research suggestions are made.

The remainder of this paper is structured as follows. The second section is concerned with measurement issues. It begins with a discussion of the number of child labourers and the need for reasonably accurate estimates of several forms of child labour, especially hazardous and other worst forms. The second section develops a policy-relevant framework for conceptualising child labour, which has as its starting point the reasons for being concerned with child labour and therefore why it is necessary to measure different forms of child labour. Section 2 concludes with a discussion of selected measurement issues. The third section describes a range of institutions and actors which would be significantly affected by the elimination of child labour, and consequently should be considered in programmes to eliminate it. For each of these, there is a discussion of decision-making as regards child labour as well as how the elimination of child labour affects these actors and institutions. The final section is a concluding section.

2. Measurement of child labour

2a. Number of child labourers

The most often quoted estimate of child labourers in the world is the ILO estimate of 250 million reported in ILO, 1996b based on work from Ashagrie (1997) and ILO/IPEC (1996). This is an approximate estimate, since good quality data on child labour are not available for many developing countries. The difficulty in estimating child labour is illustrated by the fact that ILO estimated 73 million child labourers ages 10-14 in 1995 (based on “very limited statistical information obtained from about 100 countries”), which were fraught with conceptual shortcomings, and 250 million children labourers ages 5-14 in 1996 (based in large part on “experimental surveys carried out by the ILO’s Bureau of Statistics in a number [4] of countries”) (ILO, 1996b). Both of the estimates (73 million or 250 million) indicate that child labour is a problem of major proportions.

1 The estimates are based in large part on child labour force activity rates reported in national labour force surveys and censuses. This means that labour force activity for children 5-9, and in many instances also for children 10-11 is excluded from these estimates, since many current surveys and censuses do not make the special effort required to measure child labour.

2 Since 1994, ILO has collaborated with national authorities to carry out over a dozen specially designed national child labour surveys. Results from these surveys tend to be consistent with the higher ILO estimate from 1996 (Ashagrie, 2000).
While one estimate of child labour responds to desire for simplicity of policy-makers, the media and the public, this conflicts with the complexities of the child labour problem and the need for several estimates of child labour to represent the multiple concerns discussed in the next section of this paper.

- **Several estimates of child labour are required to represent different types of child labour**, for example, to distinguish between non-hazardous, and hazardous and other worst forms of child labour.

- **National and local policy-makers require reasonably accurate estimates of child labour for monitoring progress and evaluating programmes**. Notional and very rough estimates of child labour, which may be good for advocacy purposes, are not sufficiently accurate for monitoring and evaluation.

- **Reasonably accurate estimates of different types of child labour by certain characteristics** (e.g. by geographic area, industry, occupation, family type and family income) are required by policy-makers and programme officers to help set priorities and allocate resources, monitor progress and evaluate programmes.

One all-encompassing estimate of child labour is by its very nature often misleading, since different types of child labour are combined into one number — resulting in the proverbial mixing of “apples and oranges”. One single estimate of child labour should in theory include all children who perform a labour force activity: children who do hazardous work as well as children who do non-hazardous work; children who work full-time throughout the year as well as children who work part-time; children who are wage earners as well as children who are unpaid family workers; children who are attending school as well as children who are not attending school. Indeed, the better the quality of data on child labour, the more complete is likely to be the measurement of child labour and therefore the greater the problem of mixing “apples and oranges”, since more of the marginal and less egregious forms of child labour are likely to be identified in better designed and executed surveys. The basic problem is that one all-inclusive child labour estimate includes/mixes conceptually different types of child labour, and therefore can not be very useful for policy purposes.

The need for more than one measure of child labour is discussed in the research literature. There are numerous references in the research literature to a distinction between “child labour” and “child work” (e.g. Boyden, Ling and Myers, 1998; Myers, 1999; Anker, 1995). According to this line of thought, “child labour” is considered to be bad for children whereas “child work” is considered to be either neutral or good for children. Some (e.g. White, 1996) go further and

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3 It is worth keeping in mind that “advocacy statistics” sometimes put forward by NGOs, which purposely dramatise the magnitude of child labour, can have an unexpected negative effect on government commitment to eliminating child labour. Over-estimates of child labour can make the problem appear too big to solve. For example, a child labour estimate which includes all forms of child labour (harmless part-time wage employment and unpaid family labour as well as hazardous and other worst forms of full-time work) might imply that child labour is too big a problem to eliminate in the short run. In contrast, an estimate of only hazardous and other worst forms of child labour might appear small enough to encourage policy-makers to make the effort to eliminate this in a short period of time.

4 A typical example of how a single estimate of child labour can be misinterpreted in the media - ILO’S 250 million in the world in this case - is provided by a recent newspaper article in Le Soir 2000 (Andrant, 1999) which is entitled “250 million d’enfant esclaves” (250 million enslaved children), since according to ILO only a fraction of this estimate includes children in hazardous and other worst forms of work (ILO/OPEC, 1999).
argue for a series of measures of child labour, on a continuum from good to bad. A recent paper by Grimsrud (1999) calls into question the usefulness of simple statistics on child labour and argues that one child labour estimate cannot be informative for policy purposes.

ILO documents and publications also recognise that some forms of child labour are worse than others. ILO Convention No. 138 allows for a lower minimum age for lower income countries as well as a lower minimum age for light work and non-hazardous work. The 1999 ILO Convention 182 on Worst Forms of Child Labour (which mentions child slavery, debt bondage, forced labour trafficking, child prostitution, pornography, and hazardous work) calls for renewed efforts to eliminate these forms of child labour. National legislation on child labour frequently excludes certain types of light work from minimum age legislation; some 60 countries exclude family undertakings; some 135 countries specify in law that exceptions to general rules may be made by the competent authority (ILO, 1996b).

2b. Conceptual framework for measuring child labour

Before deciding how to define and measure child labour, it is best to start at the conceptual level, by identifying characteristics of child labour which concern policy-makers and researchers. There are three overarching concerns regarding child labour in my opinion. Table 2.1 lists these three concerns in column 1, the main reasons for these concerns in column 2, possible indicators to measure these concerns in column 3 and selected comments in column 4.

- protection of children;
- development of children;
- economic and labour market impacts of child labour.

Notice that these concerns with child labour pertain to a range of institutions and actors, and address much more than just children’s welfare. Thus, economic impacts at the micro level affect families as well as children. Economic impacts at the macro and meso levels affect labour market conditions and economic growth. This contrasts with protection of children and development of children where the concern is mainly with children’s welfare. Section 4 takes up these issues for a range of actors and institutions.

Protection of children

Protection of children is the primary reason why many people and organisations are concerned about child labour. This is mainly a humanitarian concern for children’s welfare, although there are associated economic concerns such as the health impacts and costs associated with hazardous and other worst forms of child labour. There is often an expressed need to protect children from:

- hazardous and worst forms of work;
- exploitation.

Children are especially vulnerable, and childhood is seen by many as a special period of life requiring protection. Many feel that childhood should be a care-free period of life. Child
labour is viewed as exposing children to abuse and exploitation, and for this reason an international consensus has arisen against worst forms of child labour. The 1999 ILO Convention on Worst Forms of Child Labour reflects this concern and international consensus.

The indicators suggested in table 2.1 to represent protection of children against hazardous work and exploitation are difficult to measure and this is reflected in the paucity of quantitative data for these indicators. There are good reasons for this situation. Exploitation is a value-laden term which is difficult to define in an objective manner (see subsection 2c3). Although hazardous work is also value-laden, since what is considered to be hazardous work varies across cultures and development/income levels, it can be defined objectively. Subsection 2c2 discusses the measurement of hazardous and other worst forms of child labour. Given that the international community has just made hazardous and other worst forms of child labour a priority, as reflected in the new ILO Convention on Worst Forms of Child Labour, it is essential that increased efforts are directed toward learning how to measure hazardous and other worst forms of child labour.

· Development of children

Children develop quickly, acquiring skills and knowledge in preparation for becoming productive adults and citizens. Learning and skills are acquired both through formal schooling and reading and writing, as well as through work and life experiences which teach self-reliance, responsibility, and traditional skills/knowledge.

· learning reading and writing related skills in school;
· learning life skills through work experience.

A major concern with child labour is that it may interfere with children’s ability to attend and do well in school. But one must be careful about assuming that all forms of child labour interfere with school performance. While it is clear that full-time work (whether or not hazardous) is incompatible with school attendance and performance, some forms of child labour may not interfere with school attendance and performance (e.g. work during school vacations, or a few hours of work per week during school session). In some instances, school is said to be the cause of work – either because children need to earn money to help pay for school or because children see school in a negative light perhaps because of violence against them (Boyden et al., 1998). Although it is uncertain the number of work-hours during school session before school performance suffers, it seems likely that it would need to be at least 2-3 hours per day or 15 or so hours per week.6 It is also important to keep in mind that learning in school depends on the quality of schools. Learning suffers when schools are of poor quality with overcrowded classrooms, unqualified instructors and irrelevant curricula. Higher repeat rates and dropout rates for lower income students is believed to be one indication of this (Schiefelbien, 1997).

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6 According to a study in Ghana, school attendance is negatively affected by more than 10 hours of work per week (Addison et al., 1997). According to a study in the United States, academic performance of children ages 12-17 is negatively affected by 15 or more hours of work per week (Steinberg and Dornbush, 1981 cited in Netherlands Ministry of Social Affairs and Employment, 1997). Somewhat contrasting results for the United States come from D’Amico (1984) which found that while employment for more than 20 hours per week increased dropout rates, employment for less than 20 hours per week was associated with higher school grades.
Although usually ignored by programmes and policies concerned with the elimination of child labour, it is important to recognize that valuable skills and knowledge can be learned through work (Boyden et al., 1998). In past centuries, productive skills were mainly learned at work; this included apprenticeships and acquisition of traditional family trades and skills. Today, many children continue to learn this way; this is especially important in low income countries where schools are either unavailable or of poor quality. At the same time, traditional skills and values associated with unskilled work are becoming less and less valuable in today’s globalizing and rapidly changing world.

The indicators listed in table 2.1 to represent children’s development and learning are poorly measured at present. Proxy indicators are generally used. For school-based learning, it is almost always assumed that learning is equivalent to the number of school standards a child has completed. Ignored is the possibility that learning and school attendance may not be the same. Yet, schools are of such poor quality in some countries that many children do not know how to read and write even after completing primary school. Second, no recognition is given to the possibility that light work and non-hazardous work often contribute to life skills. Indeed, when the choice is between non-hazardous work, or poor quality schools or idleness, non-hazardous work might be in the child’s best interest. Third, children’s total work-hours is rarely measured. In particular, time spent in housework and child care is rarely considered, yet, many girls spend long hours doing housework and child care, and as a result do not attend school; they are as much at a disadvantage in their ability to attend school as are boys who are full-time wage earners. Fourth, when work is done in relation to school session is rarely considered. Yet, it is the total number of work-hours during school session, which is important in determining possible conflict with school attendance and performance. These measurement issues are discussed in section 2c.

In short, more research needs to be done as regards measuring learning and how it is affected by various forms of child labour, number of work hours, and school quality.

Much more needs to be done to measure learning in different settings as well as how it is affected by various forms of child labour, number of work-hours and school quality.

Economic and labour market impacts of child labour

There are a number of important economic effects associated with child labour which should concern policy-makers. In table 2.1, these concerns are divided into those which occur at the micro family level, and those which occur at the meso and macro labour market and economy levels.

- micro-family level
  family income and survival;
- macro labour market and economic levels
  labour markets (e.g. wage rates and adult unemployment);
  economic growth and economic development.

Child labour is an important source of income for poor families. It is widely believed that poverty is the main (but not the only) reason for child labour in poor countries, and that the survival of many poor families depends on the cash and in-kind income generated by child labour. Indeed, poverty and a need for income is usually the most common response to survey questions on why children in the family are working.
At the micro-family level, the economic concern is with the difficulties poor families and poor children would face in the short run if child labour were eliminated. This implies that child labour programmes should consider poor families’ need for income and consequences for family survival if children stopped work completely. It suggests, for example, the usefulness of targeted income transfers and/or subsidies for poor families with children in school; adjusting school calendars to enable children to work in peak seasons and part-time if necessary; providing income generating opportunities for adult men and women as a substitute for child labour. This also implies that quality schools are essential to encourage and justify the family sacrifices required to eliminate child labour. Much more research and analysis is needed on the determinants of hazardous and non-hazardous child labour, including on: the role of poverty and identification of situations where poverty does not preclude the elimination of child labour; the role of employers and the demand for child labour; the role played by children’s and parent’s perceptions of school quality and labour market opportunities.

Turning now to macroeconomic and labour market concerns. There is a general belief that child labour displaces adult labour and reduces adult wage rates — that is, that child labour negatively affects working conditions for adult workers (US Supreme Court, 1972). The same negative labour market effects of child labour undoubtedly exist in developing countries today, especially for less educated and less skilled adult wage workers, since child labour is almost exclusively unskilled.

Some important qualifications are worth noting. Non-hazardous work and hazardous work of children in principle should have similar labour market impacts. In contrast, the labour market effects associated with wage employment of children should differ substantially from that of unpaid family work or housework, since only the former enters directly into the labour market. Indeed, it is possible that unpaid family work by children does not negatively affect labour markets. These qualifications mean that while there is in general a negative relationship between child labour and adult employment, this relationship is not necessarily important for all forms of child labour, and reductions in even child wage labour do not necessarily translate into increases in adult employment on a one-to-one basis.

A second important set of macroeconomic impacts associated with the elimination of hazardous and other worst forms of child labour and child labour which interferes with school relate to the increased economic growth and development over the long run which would result. National economies would move from a situation where child labour without schooling is part of a vicious cycle which perpetuates poverty across generations, to a situation where the elimination of child labour and increased education contribute to a virtuous cycle of rising incomes and economic development. Likely changes include the following:

— increased labour productivity and economic growth over the long run due to increases in human capital;
— decreased poverty and more equal distribution of income due to reductions in the supply of unskilled child labour and increase in relative wages for unskilled labour;
— increased capital investment and technological change in response to increased wage rates;
— increased economic growth via the so-called demographic dividend as fertility rates and population growth rates fall due to increased education and decreased child labour;
— increased democratic tendencies and awareness of rights, as democracy is now recognised as an important factor contributing to international competitiveness (Rodrik, 1998).

Readers are referred to section 3b for more detailed discussion of these macroeconomic effects. Of course, to reap these positive macro effects, reductions in child labour would have to be accompanied by improvements in school attendance and performance, which implies that children have a quality school option and that there are income alternatives for poor families.

Since many of the above statements on the macro economic and labour market effects of child labour are based on common sense, empirical research and analysis of real world situations are required. Much more knowledge is needed especially on the size of the effects of different forms of child labour in different settings in both the short-run and the long-run.
Summary:

A number of important conclusions can be drawn from discussions in this section:

· Concerns with child labour go beyond children’s welfare and development, extending to negative macro economic effects for a range of institutions and actors.

· Since there are several reasons to be concerned with child labour, its elimination can be justified in different ways: on economic grounds, for children’s development, as well as on humanitarian and moral grounds.

· These three justifications can at times conflict with each other. For example while the elimination of non-hazardous child labour from factories may increase adult employment, this might negatively impact on children’s welfare if the removed children are prevented from working in the formal sector by enforcement of minimum age laws in a situation where schools are not available, or schools are of very poor quality; it could force poor children to take up more hazardous work in the informal sector as part of a family survival strategy.

· Different forms of child labour carry different implications for each of the three concerns listed above. Some forms(e.g. hazardous and other worst forms) are negative for all of the concerns, except possibly the micro-economic concerns of poor families and their need for income. Non-hazardous child wage labour which interferes with school performance is negative for child development and the two economic concerns. On the other hand, some forms of child labour can be acceptable as regards all three concerns listed in Table 2.1. Non-hazardous unpaid family labour of children, for example, could add to family income; have little or no affect on labour markets and economic growth; not interfere with learning or even enhance it; and not be exploitative, or physically or morally detrimental to the child.

· The concerns above and listed in table 2.1 imply the need for government policies to increase income and other transfers to poor families and children. It implies that the elimination of unacceptable forms of child labour should be a central tenet of development policy — part of an anti-poverty-oriented development strategy which emphasises education and human capital formation, poverty-alleviation and gender equity.

Finally, it is important to point out that there is relatively little data or knowledge on how to measure the indicators listed in table 2.1. For this reason, attention is given to measurement issues in section 3.

2c. Selected measurement issues

This section discusses selected measurement issues. Although far from exhaustive, important practical and conceptual difficulties are covered. As more knowledge is required on how best to measure the child labour concepts mentioned in the previous section and table 2.1, further thought and fact finding are required. For this reason, suggestions for research studies are also made throughout the remainder of this section.
The first subsection below discusses the internationally accepted definition of labour force activity and what this implies for the measurement of child labour. This should prove informative for readers who are not versed in the intricacies of labour statistics, since official child labour estimates, in theory at least, are based on this definition. The second subsection focuses on hazardous and other worst forms of child labour and the difficulties involved in measuring it. This is important, because the 1999 ILO Convention on Worst Forms of Child Labour focuses on hazardous and worst forms of child labour. Exploitation is briefly discussed in the next subsection, where it is concluded that exploitation is too general and value-laden a term to be the basis for an objective, quantitative measure of child labour. The fourth subsection below deals with work-hours and reference period. It points out that it is important to measure the total number of work-hours from all work activities (possibly including household work) when considering whether work interferes with school attendance and performance; that the timing of work over the year is important, since work during some periods during the year (e.g. during school vacations) is less likely to interfere with school; and that child labour estimates should be very sensitive to the specific survey reference period which is used, particularly whether or not it coincides with school session. The fifth and sixth subsections discuss issues related to school, the main alternative to work for children. The fifth subsection is concerned with learning and school attendance, making the obvious, but often neglected, point that school attendance and learning frequently diverge. The sixth subsection discusses the extent to which school and work are incompatible, pointing out that it is common for children to both work and go to school. The seventh subsection discusses the usefulness of measuring employment status because of differing labour market effects.

2c1. Work and labour force activity

The internationally accepted definition of the labour force specifies that the labour force consists of the unemployed and:

“All persons of either sex who furnish the supply of production of economic goods and services as defined by the United Nations accounts and balances” (ILO, 1982).

This definition of “economic” (and therefore labour force) activity is very broad, since it is based on the United Nations system of national income account statistics (i.e. SNA) definition of “economic” goods and services.

“According to these systems [of national accounts], the production of economic goods and services should include all production and processing of primary products, whether for the market, for barter for own consumption.” (ILO, 1982)

In addition to wage employment, labour force/economic activities include self-employment and unpaid family work in the family farm/business as well as unpaid family work where primary products and services produced are self-consumed. This means that, subsistence agriculture, subsistence animal care, home construction and improvement and processing food for own-consumption are labour force activities according to the internationally accepted definition. Since many children help out in family businesses and farms and with family animals, labour force activity rates for children should be relatively high in countries with large rural and informal sectors. And for this reason, it is sometimes observed that child labour force participation rates are higher in rural households with land as compared to poorer rural landless households (Addison et al., 1997; Levison, 1991).
Labour force activity is not an easily understood or measured concept, especially in less formalised economies. When it comes to unpaid family work, there are ambiguities in the internationally accepted definition of labour force activity and drawing the boundary line between labour force and non-labour force activity. In addition, there are important practical difficulties involved in collecting complete and accurate information on labour force activity. It is also important to note that the current labour force concept prioritizes activities during the reference week, with labour force activity getting priority. This means that an individual who works for only one or a few hours in the reference week is considered to be in the current labour force. It also means that students should be included in the labour force if they worked at all during the reference week.

A sizeable research literature exists on the conceptual and practical difficulties involved in the measurement of the female labour force (e.g. Anker et al., 1988; Dixon-Mueller and Anker, 1988). This research literature emphasises the under-reporting and invisibility of female labour force activity, the lack of appreciation of women’s economic and labour force contributions, and reasons for this state of affairs. There is reason to believe that measuring the child labour force and the female labour force encounter similar problems (see Levison, 1991 and Knaul, 1995). Indeed, in the author’s opinion, the under-reporting on surveys of labour force activity is likely to be greater for measuring child labour force as compared to measuring the female labour force. First of all, many labour force surveys do not collect labour force information for persons less than age 15 and almost none for persons less than age 10, on the assumption that children are not in the labour force. Secondly, it is likely that a greater percentage of interviewers and respondents assume that all students and children do not work as compared to assuming that all adult women do not work. Third, it seems likely that child labour force activity is inherently more difficult to measure than female labour force activity, since children are more likely to work part-time and as unpaid family workers.  

Useful insights on how to improve the measurement of child labour are provided by experimental surveys carried out by ILO in 1992-93 in parts of Ghana, India, Indonesia and Senegal (ILO/IPEC, 1996) and methodological studies, such as those conducted in rural India and Egypt by the author (Anker et al, 1988; Anker, 1990 and 1995) for improving the measurement of adult female labour force activity. These methodological studies investigated the effect on the reporting of female labour force activity of questionnaire design and specific survey questions; sex of interviewer; respondent type; and labour force definition. It was found that typical key word questions (e.g. What was your main activity? Did you work? Did you work for pay or profit?) produce large underestimates of the female labour force. An activity list, where a list of specific labour force activities is read out to respondents, produced a much more complete reporting of female labour force activity. Second, typical key word questions did a better job at measuring female wage employment and full-time family farm/business work as compared to measuring female unpaid family work, part-time work and seasonal work. Third, female wage labour was under-reported in rural Egypt (but not in rural India) by male respondents, possibly because they were ashamed to report that women in their household are wage employees.
Putting aside for the moment the practical difficulties in collecting labour force data discussed above, it is important to recognise that responses to survey questions about labour force activity do not tell us about those aspects of child labour noted in table 2.1 — e.g. about whether work is hazardous, or the amount of time children work, or whether work interferes with school. To learn about these aspects of child labour, follow-up questions and schedules are required. Readers are referred to subsection 2c2 for a discussion on hazardous work, and subsection 2c3 for a discussion on reference period and work-hours. In any case, to learn whether child labour activity interferes with school, it is necessary to go beyond the internationally accepted definition of labour force activity by including non-labour force activities, since housework and child care take up a great deal of children’s time, particularly the girl child’s. This implies that separate questions and/or schedules on household work and child care should be included in survey questionnaires. It is also necessary to measure school performance (see subsection 2c5).

It should be obvious from the above discussion that more extensive and better quality child labour data are needed. It should also be obvious from the above discussion that more complete and more accurate child labour data require improved survey methodologies and knowledge on how to collect policy relevant child labour data. One of the best ways to improve knowledge would be to undertake statistically sound methodological surveys of child labour which are similar to those which the author conducted in India and Egypt for adult women. This possibility is discussed in more detail in the remainder of this subsection in the following research suggestion.

**Research suggestion 1: Methodological studies to assess the best ways to measure different forms of child labour**

Methodological surveys can make valuable contributions to establishing how best to measure child labour. Their value increases when they are designed in such a way as to provide statistically objective results. In this regard, the methodology employed in Anker et al. (1988) provides a useful approach. It used balanced, replicate samples to investigate the effect on reported adult female labour force activity rates of questionnaire design, interviewer’s sex, respondent type and labour force definition. In essence, every other household was interviewed using questionnaire A or questionnaire B; questions were answered by a self-respondent in one-half of the households and by a proxy-respondent in the other half of the households.

A methodological survey for improving the measurement of child labour could include some or all of the following treatments:

— Age of child (e.g. 5-9; 10-14; 15-17);
— Respondent type (proxy-respondent; and child self-respondent);
— Definition/type of child labour (e.g. hazardous; “excessive” work-hours; school attendance; school performance; employment status);
— Questionnaire design (e.g. activity list and keyword questions; follow-up questions; schedule which relates school calendar and work).

This approach differs conceptually from the approach used in ILO/IPEC (1996). The approach suggested here uses replicate samples and balanced sample designs, thereby enabling the analyst to draw statistically valid conclusions between different approaches to data collection. The approach in ILO/IPEC (1996) uses a wider range of approaches in different settings to learn about how best to collect child labour data.
Some of the above treatments could be built into the sample design (e.g. respondent type and questionnaire design) while other treatments could be established at the analysis stage (e.g. age of child; definition of child labour). Although not required, the value of methodological child labour surveys would be greatly enhanced if they were carried out in: (i) countries where ILO’s SIMPOC surveys have already been completed; and/or (ii) countries where time-use survey data are available, such as from the World Bank LSMS. In this way, methodological survey results could also be compared to: (i) the best available child labour data for the country (e.g. SIMPOC data); and/or (ii) a so-called “gold standard” (e.g. time-use based data).
2c2. Hazardous work

It is not always evident when work is hazardous or what is the best way to measure hazardous work in a survey. It is undoubtedly easier to “know it when you see it” than to define it and collect accurate survey information to measure it. Yet, the need to measure hazardous and other worst forms of child labour has taken on some urgency because of the new 1999 ILO Convention on Worst Forms of Child Labour.

For the purposes of this Convention, the Worst Forms of Child Labour comprise:

“(a) all forms of slavery or practices similar to slavery, such as the sale and trafficking of children, debt bondage and serfdom and forced or compulsory labour, including forced or compulsory recruitment of children for use in armed conflict;

(b) the use, procuring or offering of a child for prostitution, for the production of pornography or for pornographic performances;

(c) the use, procuring or offering of a child for illicit activities, in particular for the production and trafficking of drugs as defined in the relevant international treaties;

(d) work which, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of children.” (ILO, 1999a).

Although the worst forms of child labour indicated in Article 3, clauses (a), (b) and (c) above are clear, it is not obvious what work is likely to harm the “health, safety or morals of children” noted in Article (d). Article 4 of the Convention calls for the national determination of hazardous work (ILO, 1999b).

According to the Recommendation which accompanies Convention 183, consideration should be given to the following to determine the types of work which are hazardous:

“(a) work which exposes children to physical, psychological or sexual abuse;

(b) work underground, under water, at dangerous heights or in confined spaces;

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9 It is worth noting that hazardous child labour exists to some extent also in developed countries. For example, the second largest retail chain in the United States recently paid a $325,000 fine (without admitting liability) to settle allegations that 16 and 17 year olds operated machinery such as fork lifts, freight elevators and paper balers in violation of federal law (WSJ, 1999). Some of the 15 to 17 year olds in the Old Amish Order in the United States, who are legally exempt from attending school in order to protect religious freedoms (US Supreme Court, 1972), includes Amish children who work in generally family run but possibly hazardous woodworking and sawmill shops in violation of child labour laws on hazardous work. To exempt such Old Amish children from this law, the US House of Representatives passed by voice vote on March 2, 1999 a bill to this effect (International Herald Tribune, 1998; BNA, Daily Labor Report, 1999).
work with dangerous machinery, equipment and tools, or which involves the manual handling or transport of heavy loads;

(d) work in an unhealthy environment which may, for example, expose children to hazardous substances, agents or processes, or to temperatures, noise levels, or vibrations damaging to their health;

(e) work under particularly difficult conditions such as work for long hours or during the night or work where the child is unreasonably confined to the premises of the employer.” (ILO, 1999b).

Thus the Recommendation mentions a number of different criteria to determine hazardous work for children, including: unhealthy environments; exposure to hazardous substances and agents; heavy loads; dangerous machinery, equipment or tools; work in unacceptable places such as under water, underground, at heights and in confined space; work in particularly difficult conditions, such as at night, for long hours, or involving unreasonable confinement on an employer’s premises.

Table 2.2, which is drawn from ILO (1991), provides a useful compilation on how hazardous and prohibited child labour is specified in national legislation. Four general criteria are used: (i) general prohibition; (ii) industry or occupation; (iii) physical environment; (iv) agents or products.

Drawing on the recent ILO Convention and Recommendation and table 2.2, the remainder of this subsection presents some thoughts on possible approaches to measuring hazardous and other worst forms of child labour. Before beginning this discussion, it should be noted that legislation on hazardous child labour generally neglects the negative effects which repetitive and menial work can have on mental and intellectual development. For example, I was personally struck during the field work for the study of the economics of the carpet industry in India with which I was associated (Levison et al., 1998; Anker et al., 1998) by the way in which the repetitive and fixed position nature of carpet knotting dulled the child workers and made them look and act like robots. Indeed, my feeling after the field visits was that this aspect of carpet weaving was worse for children’s development than the physical hazards of the work.

The most common approach in national legislation is to specify particular occupations or industries as hazardous for children (see column 2 in table 2.2). One possible way to operationalize this approach would be to begin by using rapid assessment techniques and key informants as described in ILO/IPEC (forthcoming) and Rahmann (1997) to identify in which hazardous industries and occupations substantial numbers of children are working. Child labour surveys could then be used to collect information on a representative sample of children from the industries and occupations identified through rapid assessment. The number of hazardous child labourers in a country as well as by industry and occupation, could then be approximated by assuming that all of the children who work in the industries and occupations identified using rapid assessment techniques are performing hazardous work. Conceptual problems with this approach are the implicit assumptions that: (i) work in all other industries and occupations is non-hazardous, even though this is known to be a gross oversimplification; and (ii) all work in a hazardous industry is hazardous, even though it is known that a range of hazardous and non-hazardous work activities are performed in each industry. Practical problems with this approach are that: (i) the worst forms of child labour such as prostitution, pornography, drug trafficking and slavery/bondage, are illegal and immoral and so are unlikely to be reported by respondents on surveys; (ii) there are the usual substantial difficulties in coding responses on industry and
occupation due to imprecise information when open-ended survey questions are used, or respondent fatigue when a closed-ended question with long lists of occupations and industries are read out to respondents; and (iii) incomplete knowledge and/or awareness of proxy-respondents about a child’s industry and occupation. Another major difficulty with this approach is that the measurement of hazardous occupations and industries in national surveys is subject to high sample variation, due to the geographic clustering of many hazardous occupations and industries with high concentrations of child labour. For example, a representative national survey in India would be highly unlikely to sample Ferozabad City (where all of the glass bangles in India are made, often with child labour) because of its relatively small population, and so is unlikely to find any children working in the hazardous glass bangles industry. This implies that in order to obtain reasonably accurate estimates of the number of children working in specific hazardous industries and other worst form occupations, purposeful samples need to be drawn and/or studies conducted in localities where these industries are concentrated; another possibility would be to use rapid assessment estimation techniques such as those described in ILO/IPEC (forthcoming) and/or Bilsborrow et al. (1998).

A second approach would be to ask on surveys about children’s use of, or exposure to, dangerous agents or products at work. (See column 4 in table 2.2 for a list of dangerous agents and products included in national legislation on hazardous forms of child labour.) This could be done using open-ended questions or closed-ended questions. One major problem with open-ended questions is that each respondent is likely to have a different understanding of what is meant by words such as “dangerous”, “hazardous”, “agents”, “products”. It is possible that substantial under-reporting would occur; answers would, in any case, be difficult to code. Closed-ended questions, where lists of hazardous agents and products are read out to respondents, would undoubtedly increase reported rates of hazardous child labour, but closed ended questions have their own problems. Responses are restricted to the list of dangerous agents and products contained in the printed list in the questionnaire; and, the longer and more complete the list read out to respondents, the more likely would be respondent fatigue and loss in response accuracy. Additional problems include: limited knowledge of proxy-respondents about details of the work children are performing; increased recall error the farther back in time the reference period covers (e.g. ever as compared to last year, or last week); uncertainty about what should be the preferred reference period given the trade-off between the advantages of lengthening the reference period in order to increase observation frequency compared to the advantages of shortening the reference period in order to reduce recall error and the difficulty of attributing cause and effect. Given the problems with this approach, it would only appear to be appropriate for studies of specific industries and occupations.

A third approach would be to ask respondents about children’s injuries and illnesses caused by work. Many of the same problems with the two previous approaches discussed above also apply to this approach. Especially important here is that individuals differ in their judgement about what constitutes an “injury” or an “illness” (Strauss and Thomas, 1998; Bilsborrow et al., 1998). As important, interpretations of these words differ across countries as well as communities within countries. For example, in some settings, hospitalisation and/or inability to work may be felt to be required; in other settings, it may not. An additional problem, which increases along with the length of the reference period, is the difficulty in establishing whether a current injury or illness is due to work activities which occurred in the past.

A fourth approach would be to ask respondents whether they believe that the work performed by a child has negatively affected the child’s “health, safety and morals” (see column 1 in table 2.2). As with all subjective questions, responses would not necessarily represent fact, and different types of respondent (e.g. self-respondents as compared to proxy-respondents) and
communities might provide different responses. However, questions of this type would provide valuable insights into what people are thinking and so would be useful to policy-makers.

An important conceptual problem with approaches two, three and four above is that injury, illness and exposure to dangerous agents and products occur in all settings (i.e. not just in paid employment at a work site); and to all children (i.e. not just to working children). For example, housework often exposes children to open fires, heavy loads and sharp instruments. Work on the family farm may expose children to pesticides, chemical fertilisers, heavy loads and dangerous machinery. This implies that information on injuries, health and illness should be collected for: (i) all children, regardless of their work status; and (ii) all work settings, including household work.

There are also important practical implications of the discussion for measuring hazardous and other worst forms of work. Surveys, studies and action need to be extended to children up to age 18 years, since the prohibition of hazardous child labour refers to children less than age 18 years. Considerable new research and methodological studies are warranted in light of current knowledge on how to measure hazardous child labour.

Research suggestion 2: Measuring hazardous work in surveys

An obvious implication of the above discussion is that fact-finding is required in order to establish how best to measure hazardous and other worst forms of child labour, especially on household surveys. Exploratory and methodological research would be very useful in this regard — where results from different approaches are compared. A good argument can be made for including medical tests in some of this research in order to establish the actual health condition of children (i.e. establish a “gold standard”) against which to judge survey results obtained from different data collection approaches. The case can also be made for inclusion of non-working children, in order to create a sort of “control group”.

Research suggestion 3: Understanding what families and children believe is hazardous work

Opinions on what constitutes hazardous work undoubtedly differ across countries and cultures as well as across regions, households and children within countries — even though there should be consensus for many worst forms of child labour (e.g. prostitution, bondage, drag trafficking etc.). Opinions may (or may not) be related to economic development across countries or to household income within countries. It is possible, that opinions of poorer and less educated households may be related to a lack knowledge on hazards. Poor families may also find traditional family occupations and activities which are hazardous more acceptable as compared to higher income and better educated households.

Qualitative and quantitative research studies could investigate what families and children (and even policy-makers) believe constitutes hazardous work. Such information would have considerable practical value. It would be a valuable compliment to national legislation which specifies what is hazardous work for children. It could identify situations where awareness-raising and/or provision of information are needed. It could also help in the design of survey questionnaires to measure hazardous work.

2c3. Exploitation
It is often mentioned that children need to be protected from exploitation, especially from the exploitation of employers, since working children are vulnerable.\(^4\) But it is very difficult to concretize the term exploitation. According to the Concise Oxford Dictionary (1991), exploit is to “utilize or take advantage of a person for one’s own ends”. The concept is clear, someone (the child here) is taken advantage of by someone else. But what does it mean with regard to child labour? Is a child exploited if she/he works instead of attends school, when this is his/her parents’ decision as part of a family survival strategy? Who would want to accuse such parents of exploitation when they are using their best judgement under difficult circumstances. Is it exploitation if an employer pays a child a lower wage rate than an adult, but this lower wage rate is commensurate with the child’s lower productivity? Is it exploitation if an employer pays both adults and children the same low, piece rate or wage rate? According to neo-classical economics, these examples would not necessarily constitute exploitation. Discussion in this paragraph indicates that there can be several interpretations of the term “exploitation” — and that while exploitation describes an unacceptable situation, and children should be protected from exploitation, it is difficult to define and measure exploitative child labour.

2c4. Work-hours and reference period

It is important to know the total number of work-hours for each child, since it is the total number of work-hours, not work-hours in any particular activity, which may conflict with a child’s ability to attend and learn in school. Similarly, it is the total number of work-hours, not simply whether or not a child works, which determines labour market effects.

The need for information on children’s total number of work-hours has implications for data collection, data analysis and policy-making. First, information should be collected in surveys on work-hours in each work activity performed (including housework and child care) in order to enable one to calculate each child’s total number of work-hours for all activities taken together. Information for only a child’s “primary” work activity is insufficient for understanding possible conflicts between school attendance and performance and work — especially for girls who spend so much time doing housework and child care. Second, information should be collected on the distribution of work-hours over the year (in particular on how this relates to the school calendar). Work at different times during the year have different implications for school performance and the labour markets. Work during school vacations does not necessarily conflict with school attendance or performance and probably has less affect on labour markets (assuming that vacations coincide with peak agricultural periods when many children work as unpaid family labourers) as compared to work during school session. Third, the current labour force concept with its one week reference period is not particularly good for documenting or understanding child labour — unless data are collected for several one week reference periods during the year. Fourth, to observe the labour markets effects of child labour, work-hours should be collected and reported separately by employment status (i.e. wage employment and self-employment/unpaid family labour).

2c5. Learning and school

School is the main alternative to child labour (Weiner, 1991) and literacy and mathematical skills are increasingly important in today’s rapidly changing technological environment and globalizing economy (see discussion in section 3b). There is general agreement

\(^{4}\) Interestingly, recent studies of the economics of child labour in prohibited industries in India found that employers hire children partly because of their innocence, docility and honesty (Anker et al, 1998).
that the elimination of child labour should go hand-in-hand with increased schooling. Two aspects of this relationship questioned in this subsection are the possibilities that: (i) school attendance and learning are not synonymous; and (ii) returns to education for poor children are relatively low due in large part to poor school quality and availability. Not enough is known about these aspects and more research is required.

While the number of years of school attendance, and even more so, the number of standards completed tend to be good proxies for learning and skill development, _all too frequently children who attend school do not learn much_. This is true in all countries, developed and developing, as demonstrated by a recent UNDP study of 12 developed countries which found, for example, that 21 per cent of adults in the United States and 22 per cent of adults in the UK are functionally illiterate in that they are unable to read a gas bill or newspaper, or do simple arithmetic (Clarity, 1999). One would expect the situation in many part of the Third World countries to be worse for several reasons. Third World children go to school for fewer years. Many work long hours and this may affect study habits and attendance records. And perhaps most importantly, many children in the Third World attend poor quality schools. Indeed, it is unfortunately true that schools in some poor countries are so bad that they could be considered as hazardous for, and abusive of, children. In many schools: children have to sit in one position for long periods of time; children are crammed into small rooms, thereby creating a conducive environment for disease transmission; children are subject to mental abuse, being repeatedly criticised and humiliated and told that they are stupid and incompetent; children are subject to physical abuse where corporal punishment is applied.

Economists typically investigate the value of school by estimating returns to education based on the earnings of adults with different educational levels – although the usefulness of this approach is being increasingly questioned by labour economists (Bloom and Williamson, 1997). There tends to be a strong upward bias in the estimated rate of return; due mainly to crudentialism, Berry (1999) feels that the true rate of return to education might be as low as 40 per cent of the typical estimate. Estimated rates of return are, in any case, highly sensitive to the assumed, but unknown, discount rate. Another major problem with this approach – not usually considered but deserving attention in the context of child labour – is that poor households are likely to have lower than average returns to education due to poorer quality schools and labour market discrimination. Gender differences are also important here.

_To assist policy formulation, information should be collected on the strengths and weaknesses of education and schooling_. Such information would be especially valuable as complement to child labour surveys. It would be worthwhile including short tests of children’s basic reading and writing skills on child labour surveys, since it is important to know how much children actually learn at school. It would be worthwhile collecting information on the quality of local schools in separate school interviews. The following types of information could be collected: distance/availability of schools, class size, teachers’ qualifications, quality/availability of pedagogical materials, relevance of curriculum for the labour market, extent of grade repeating, school hours, and school calendar. Third, it would be worthwhile collecting information in child labour surveys on school-related monetary costs, such as for school fees, books, uniforms, transport, and tuition payments to teachers, as well as other factors which affect the attractiveness of school such as safety concerns for daughters and dangers on route to school.

_It would also be useful to increase our understanding of how poor families and poor children view school and how they perceive returns to education_. What do they think of school quality, commitment of instructors, relevance of curriculum for skill acquisition, likelihood of learning and graduating, adult labour market opportunities, possibilities of acquiring skills from
child labour, costs of school, possible discrimination in school and in the labour market? Collecting such information would increase our understanding of the situation as seen by poor children and poor households. It is possible that in some circumstances, poor families could be rational in having their children work rather than go to school, as they may have low returns to education. In other instances, perceptions could be based on misinformation or inadequate information.

Research suggestion 4: Value and quality of school as seen by poor parents and poor children

As discussed in the above text, relatively little is known about what poor parents and poor children think of schooling and its economic value, such as the quality of instructions and instructors, relevance of curricula, perceived affect on earnings when adult, safety concerns, possible alienation of children from traditional lifestyles, etc. Yet, this is important information for designing policies for increasing school attendance and attainment.

It would be worthwhile learning more about perceptions of school and schooling by poor people. This could be done using focussed group discussions, case studies and other qualitative approaches. Based on insights gained from qualitative studies, a select set of questions could be developed for inclusion in future child labour surveys.

2c6. Combining school and work

It is common to assume that school attendance and child labour are mutually independent, that school attendance precludes work. The available evidence indicates that it is wrong to assume that school and work are mutually exclusive.

According to survey data from a variety of developing countries (table 2.3) many children who attend school also work; similarly, many working children go to school. Although it is not possible to derive one, typical percentage for developing countries from available data (partly because results vary across countries and settings within countries, and partly because of major differences across surveys in definitions, age groups and methodologies), it is clear from the scattered information in table 2.3 that school children in developing countries often work. In rural Ghana and Ivory Coast according to World Bank survey data, for example, roughly 50 per cent of school children aged approximately 7-14 also work and approximately 70 per cent of working children also attend school. According to a Rädda Barnen survey of 200 working children in five developing countries, while most children valued education, 72 per cent preferred combining school and work (Boyden et al., 1998). High percentages are to be expected in developing countries where children spend relatively little time in school (e.g. in Bangladesh, the school day is only two hours and the school year is only 120 days),\(^{11}\) and where there is a large owner-cultivator sector where children help out on the family farm.

It is also common in high income countries for school children to work. In the United Kingdom, a majority of children had experienced some type of paid employment by ages 14-15, with one-fifth having had this experience by age 10 (Lavelette et al., 1995). In the United States,

\(^{11}\) Evidence from around the world indicates that school is not full time, as in both developing and developed countries the average school year is around 200 days and 1,000 hours (Lee and Barro, 1998).
over one-half of 14 year olds do some work during the year according to the US Bureau of Labour Statistics (Wall Street Journal, 1999).

Combining school and work was also quite common in the 19th Century in currently developed countries when they were industrialising. Indeed, half-day school was the educational policy for many years in 19th Century England — partly in recognition of the need to enable children to have the time necessary to also work and help their families economically (Cunningham, 1995). Currently developed countries originally set their school calender to enable children to work during agricultural peak-seasons. In the United States, there is a long summer vacation; in Switzerland, there is a one week vacation in October known locally as the “potatoes vacation”, as this is when potatoes were traditionally harvested.

An important implication of this situation for child labour policy-makers and programmes as well as educationalists and development planners in developing countries is that school curricula, school calendars, and methods of instruction should take into consideration the fact that non-hazardous child labour is common among school children, and often necessary for family survival. This reality implies that: (i) school calendars should be synchronised with peak demands for family labour, such as agricultural seasons in rural areas; (ii) methods of instruction should take into consideration that many students are experienced for their age; and (iii) curricula should have strong practical elements in light of the fact that many students will be thinking of beginning full-time work as young adults.

Another policy implication is that schools could be a useful entry point for reducing hazardous child labour and exploitation, by providing children with information about their rights as well as about how hazardous work can be eliminated. Such information could prove to be especially effective for children who perform hazardous work in a family farm or business setting. Exploitation of children who work as wage earners could be reduced if school armed children with information about their rights.

One implication for household surveys is that information on child labour should be collected in relation to the school calendar. Questions should enquire about child labour during school session to observe possible conflict with school. Other questions should ask about child labour during school vacation. Another implication is that information should be collected on study time and the regularity of children’s school attendance.
Research suggestion 5: Understanding the relationship between school, learning and work

Since school and work are often combined, it is important to document and understand more fully the interaction between school and work. Available survey data, especially ILO SIMPOC data, could be brought together and harmonized as much as possible to document the relationship in different settings between school attendance and standards completed on the one hand and work, and work-hours, and type of work performed on the other hand. It would be useful to establish how the frequency of various school-work combinations varies with household characteristics (such as income, family size, family structure, ownership of land or business), child characteristics (e.g. age, sex, birth order), community and labour market settings (e.g. wage labour opportunities, frequency of child labour in community/religion/ethnic group) and school settings (e.g. available/distance, quality, school hours per day and per year). It would be especially useful if it could be established, with even a rough order of magnitude, the minimum number of work-hours before school attendance and/or standards completed are affected. Secondary data analysis could be followed up by empirical analysis of child labour survey data where short achievement tests are administered (see section 2c5) and information is collected on children’s study habits and work-hours in and out of school session.

Also worthwhile would be investigating the relationship between non-hazardous child labour and children’s labour market outcomes when they become adults (e.g. wages/income, occupation, responsibilities, careers). Is non-hazardous child labour negatively or positively related to a child’s labour market outcomes when an adult – or is there no effect? If the effect is negative, is there a threshold number of work hours while in school before this negative effect appears? Are certain types of non-hazardous child labour particularly harmful or helpful? In order to analyse these issues, longitudinal data analysis for individual children are required. The preference would be panel data, in order to reduce recall error. Given the costliness and difficulty of collecting and analysing panel data, however, analysis based on retrospective survey questions (e.g. age began work; work experience; type and hours of work while in school; school record) along with questions on present work might prove useful for teenagers (where recall error would be limited) and young adults in their twenties (where long term earning prospects should already have been established).

2c7. Employment status and household work

Finally, worth mentioning is the need for separate statistics on different types of child labour activities:

- wage employment;
- unpaid family labour and self-employment;
- household work and child care.

Wage employment and unpaid family labour/self employment are labour force activities and constitute the two categories for employment status. It is necessary to distinguish between them, because they have different impacts on labour markets, economies and families. Wage employment has a much larger and more direct impact on labour market conditions.

Household work and child care, although not a labour force activity according to the accepted international definition, is also important — since household work often interferes with school attendance and performance. For example, the long hours of household work and child care performed by girls is a major negative gender aspect of child labour. While there is
considerable experience measuring employment status on labour force and household surveys, there is relatively little experience measuring work-hours in housework and child care.

3. Who decides on child labour and who is affected by child labour

Most discussion, policies and programmes on child labour focus on the child and, to a lesser extent, his/her family. While it is appropriate to focus on children, since children are the main beneficiaries of and reason for child labour laws, policies and programmes, it is wrong to stop there. There are other actors and institutions which influence decisions on whether or not children work; and are affected by the fact that children work. It is also important to understand which other actors and institutions influence the level and form of child labour and/or would benefit from the elimination of child labour — and consequently, which other actors and institutions could be enlisted in efforts to eliminate unacceptable forms of child labour and to help poor families bear the short run costs associated with the elimination of this child labour.

3a. The actors and institutions

Table 3.1 lists important actors and institutions, the extent to which they affect decisions on whether or not children work, and the economic consequences for them if child labour were eliminated. It starts with the child, and moves progressively on to larger, more aggregated units: to parents/household/family; community; employer/industry; labour market; national economy; and international trade. In economist’s jargon, it moves from the micro-level to the macro-level.

3b. How actors and institutions affect and are affected by child labour and its elimination

3b1. Children

Children are the main focus and intended beneficiary of child labour policies and programmes. The elimination of child labour by almost everyone is seen as a way to protect children from hazardous and exploitative work, as well as a way to help ensure that children develop into healthy and productive adults (two of the three concerns with child labour noted in table 2.1).

Of course, improving child development by eliminating child labour depends on the existence of viable options to non-hazardous work for children, and in particular on the availability of quality schools. In the absence of quality schools, it is questionable whether non-work is better than non-hazardous work for children’s development, since non-hazardous work might provide children with some valuable life skills whereas idleness would not.

This means that compulsory school age should be dovetailed with minimum working age in order to avoid an idle period for children. Indeed, the main rationale for setting the compulsory school age in the United States was to make it the same as the minimum work age in order to avoid a period of life when children would be forced to be idle (US Supreme Court, 1972). Unfortunately, it is common today in poorer countries for the legally specified working age and compulsory school age (or standard) not to coincide. This possibility of a legally prescribed period of idleness for children is clearly present in countries with low compulsory school age or standard. For example, when only primary school is compulsory, (i.e. there is only 5 or 7 years of compulsory education), children who begin school at age 5 or 6 will have completed primary school and their compulsory education by ages 10-13 — before they are legally allowed to work. An example of this dilemma for parents and children is provided by the diamond polishing industry in western India where children from a relatively well-to-do caste begin working before age 14 after having completed primary school (Saradhi, 1998); they are
encouraged by their parents to do this in the belief that this is good for them, as it is believed to help ensure them a productive adult life.

The micro family-level economic impacts in the short run (first part of the third concern in table 2.1) of the elimination of child labour are important for poor children and poor families. Since almost all children live with their family, their economic situation in the short run is indistinguishable from that of their family/household. If a family is poor and needs income to survive, so do children in this family. It is, therefore, not surprising that many poor children willingly work – both to increase family income as well as to help maintain solidarity with their family (Boyden et al., 1998). This means that eliminating child labour without taking into account the need of poor children (and their families) for income could be counter productive for the children. Poverty rates could increase and/or levels of hazardous and other worst forms of child labour could increase as children could be compelled into earning income in worse conditions in the informal sector. Policies and programmes which take this reality into account could include: providing income transfers to poor families with children attending school; introducing income generating opportunities for poor women, families, and communities; school subsidies and stipends for poor children; allowing children to engage in non-hazardous work as long as it does not interfere with school performance.

The positive macro economic effects (second part of third concern in table 2.1) which the elimination of child labour would have on labour markets and economic development benefit children in the long run. The problem for poor children and their families is that they have to survive the short run to be able to take advantage of the rosy long run which is predicted. This implies that other actors and institutions in society (e.g. employers, communities and governments) who would benefit from more rapid economic growth should be helping poor children and their families to survive the short run. As mentioned above, this argues for poverty-oriented development policies, programmes and strategies which emphasize targeted poverty programmes, human capital formation and quality schools.

There is a need to better understand how decisions are made within the family, and particularly the role children play in this. Economists use household decision-making models to explain the allocation of time and resource among family members, including whether and how much children work. The usual assumption is that the household head decides in the best interests of all household members. There are problems with this usual assumption. First of all, even when parents decide whether or not children work, children’s behaviour and opinions may greatly influence their parent’s decisions. For example, how well a child does in school may influence decisions regarding the child’s continuation in school. When a child does not like school and/or does poorly in school, parents are less likely to view further schooling as in the best interest of the child or the family. Poor families may decide to concentrate their limited resources on children who do well in school and so are more likely to benefit from school. It also means that parents are less likely to invest in girl’s education, since women’s labour market opportunities are worse than men’s. Second, there is increasing consensus among children’s rights activists that children’s voice, opinions and experiences should be taken into account (Myers, 1999).

3b2. Parents and families

As discussed above, it is mainly parents who decide whether or not children work (although also as discussed in the previous subsection, children often influence decisions). In contrast, children receive most of the economic benefits from attending school and not working, since the increased human capital from school is embodied in children.
This juxtaposition of decision-making (mainly by parents) and economic benefits within the family (mainly accruing to children) implies that parents are either being altruistic toward children who attend school and do not work, or have no choice due to effective enforcement of minimum age laws. They willingly forego income from child labour to help enable their children to have a better life when they become adults.

It is important to recognize that there are limits to parental altruism, especially for many poor families in poor countries. First of all, family survival may require income from child labour. Indeed, it is generally accepted that poverty is the main cause of child labour. For example, in response to a survey question in the 1996 ILO Child Labour Survey in Cambodia, 82 per cent of respondents singled out a need for income as the main reason for child labour (Cambodian National Institute of Statistics, 1997). This response is consistent with typical findings that working children account for around 15-20 per cent of family income (e.g. Anker and Melkas, 1996 for estimates from NGOs around the world; ILO/IPEC, 1996 for Indonesia; Cartwright and Patrinos, 1998 for urban Bolivia; Siddiqi and Patrinos, 1995 for Peru and Paraguay and a reference to rural 18th Century England) and that expenditure on food in poor families in poor countries (such as India) averages around 80 per cent of total expenditures (van der Hoeven and Anker, 1994).

Second, poor families benefit from having several different income sources (including from child labour), as this helps ensure an income flow at all times (Grootheert and Kanbur, 1995).

Third, some parents, irrespective of income level, are not completely altruistic toward their children. Many fathers, for example, shirk responsibility toward their own children; this is attested to around the world by the prevalence of female-headed households and the very high poverty rates found among female-headed households (Buvinic, 1995).

Fourth, family crises (eg death, disability or serious illness of a father or mother; abandonment of the family by the father; lose of a job by a parent) can cause children to drop out of school in order to work and thereby help ensure family survival. Such crises should be common among poor families in poor countries in light of high levels of illness, injury, mortality, female-headed households and insecure employment. Further research is required to document the extensiveness of family crises and investigate the affect which (the advent, or end of) family crises have on child labour.

Fifth, an important economic benefit which parents might receive from educated children - old age support - is highly uncertain (Nugent and Anker, 1990). It depends on exogenous and unknowable factors. It depends on a child’s willingness to contribute financially to their parent’s old age when s/he becomes an adult, which in turn depends on for example: a child’s marital status, migrant status and physical proximity to parents when an adult. It also depends on a child’s eventual ability to provide old age support, which in turn depends on their income and number of children, as well as education-earnings profiles and labour market conditions in the future. Given these uncertainties, it is unlikely that parents harbour great expectations of increased economic support in old age from better educated children.

Sixth, work and school are often combined (see table 2.3). This means that parent’s economic sacrifices can be reduced when children combine school and work. This is especially feasible to do successfully for unpaid household work and unpaid family work in the family farm or family business.
There are two main points underlying discussion in this subsection. Parents are altruistic toward their children in an economic sense when their children attend school rather than work, since the cost (both direct costs of school plus indirect costs of foregone income from child labour) exceeds the uncertain economic benefits to parents such as increased support in old age. At the same time, there are severe limits to altruism for poor parents in poor countries. For these reasons, it is important that government policies and child labour programmes encourage parents to pursue their altruistic feelings, through for example, improving the quality and attractiveness of school; increasing the availability and reducing the cost of school; and providing economic support and incentives for poor families with children in school.

*Research suggestion 6: Economic determinants of child labour based on survey data and, especially ILO’s SIMPOC data*

One of the most important advances for child labour research in recent years is the addition of new household-level data. ILO’s statistical information programme on child labour (SIMPOC) is especially noteworthy in this regard, with national child labour surveys having been completed in over 11 countries (e.g. Bangladesh, Philippines, Pakistan, Turkey), and with plans to conduct 50 more surveys in the next five years.

These new survey data provide an excellent opportunity for comparative cross-country empirical analysis of child labour. Such analyses would greatly improve knowledge about the level and distribution by child labour as well as its consequences and its determinants.

*Research suggestion 7: Impact assessments of child and family-level economic oriented programmes to replace lost income from school attendance and/or increase attractiveness of school*

Recognition that poverty and the need of poor families for income is the most important determinant of child labour carries with it an obvious policy implication - that the elimination of child labour could be advanced by financially assisting poor families so that they can better “afford” to forego income from child labour. Boyden et al (1998) identify five main types of economic incentive programmes: (i) cash payments to low income families; (ii) school vouchers; (iii) school-based food programmes; (iv) subsidies for school transportation; and (v) education with income from work in apprenticeship programmes. To these five, one could add (vi) development, poverty and income generating programmes for poor families which have as a qualifying criteria children’s school attendance (see Anker and Melkas, 1996). This last type is discussed below in research suggestion 8.

Anker and Melkas (1996) and Schiefelbien (1997) provide reviews of experiences with some of these economic incentive programmes. These reviews need to be followed up with detailed empirical evaluations of the impact such programmes have had on child labour and school attendance.

*Research suggestion 8: Impact assessments of poverty-oriented programmes which have the elimination of child labour as a component*

It is increasingly being recognised that the elimination of child labour should be addressed within comprehensive anti-poverty programmes. There are a number of these programmes now, especially in Latin America. Some are enormous in size. In Mexico, for example, the budget of one such programme (Progressa) amounts to approximately 0.2 percent of GDP, and there are plans to expand this programme (which is operative in only some rural areas at present) to urban areas and additional rural areas (Gomez de Leon and Parker, 1999).
Poor families in poor communities in this programme are identified through the use of household surveys and other data. They are given cash payments amounting to approximately 22 percent of family income on average. The money is given to the mother (in the hope that this will increase female status, independence and power) on the condition that her children regularly attend school. While this Mexican programme is a poverty reduction programme, not a child labour programme, and the elimination of child labour is not its main goal, this programme provides what appears to be an excellent approach to the elimination of child labour.

It would be worthwhile putting together a list of comprehensive poverty-oriented programmes around the world which include school attendance and/or child labour as an element of their comprehensive strategy. Indeed, it can be argued that it would be worthwhile documenting a range of comprehensive poverty-oriented programmes regardless of whether or not they have child labour or school attendance elements, since comprehensive poverty reduction is likely to have a major affect on child labour and school attendance. With this documentation in hand, it would be worthwhile undertaking objective and empirical impact assessments of the most interesting of these programmes regarding their affect on child labour.

3b3. Communities

Communities (such as villages and neighbourhoods; religious groups; ethnic and tribal groups; castes; extended kin networks) play an important role in determining the level and extent of child labour, and in particular the level and extent of hazardous and other worst forms of child labour. Communities establish, shape and determine values and traditions. This includes the extent to which individuals, households and employers consider different forms of child labour acceptable, the importance they attach to education, and how they view female and male roles. Traditions and traditional values are especially important in determining the extent of hazardous child labour, since what is considered to be hazardous work, as well as what is considered to be acceptable work for children, varies across communities. For example, when children in a community are expected to follow in their parents footsteps, and their family’s traditional work includes hazardous activities (e.g. say tanning), then it is likely that children in this community would perform these hazardous activities in order to learn the skills. Traditions and traditional values also have an important effect on child development and school attendance. This is particularly relevant for girls who according to tradition might be expected to perform household work and care for younger siblings rather than attend school (partly as preparation for becoming mothers and wives when they grow up). The important role communities play in perpetuating traditions and determining values as regards child labour implies that awareness-raising activities should focus on the reasons for traditional beliefs in different communities. Awareness-raising activities should also enlist progressive community leaders.

Second, work opportunities for children, and their hazardousness, are mainly determined by local labour market working conditions and traditions. Children are generally unable to migrate in search of work, and so tend to be almost totally dependent on local labour market opportunities and working conditions.

Third, some of the most important child labour policies are implemented at the community level. Schools, in particular primary schools, are placed in local communities (villages and neighbourhoods). Also development and poverty programmes frequently target poor communities.
Fourth, **community-level data are very important for researchers.** This is partly because of their relevance for policy-makers as referred to above. Partly this is due to statistical properties which allow community variables to be used as instrument variables in the estimation of household decision-making models.

_Restriction suggestion 9: Explaining differences in child labour between equally poor villages/communities, regions/states and countries_

Despite the strong direct relationship between poverty and child labour at the household-level as well as at the country-level, the extent of child labour varies across: equally poor villages/communities, equally poor regions within countries, and equally poor countries. This implies that poverty is not the only determinant of child labour. One way to separate out the extent to which child labour and different forms of child labour are determined by poverty as compared to other factors would be to identify “similar” villages or other communities in terms of income and poverty levels but with a relatively low or relatively high rate of different forms of child labour; the same could be done with regions/states within countries, as well as with countries. For example, it should be possible to identify “matched” (except for high or low rates of child labour) villages, regions/states and countries using data from ILO’s SIMPOC child labour surveys, World Bank’s LSMS and national rapid assessments of child labour.

Qualitative and quantitative data analysis of “matched” villages, “matched” regions, and “matched” countries could be used to increase our understanding of why some villages/regions/countries have low rates of child labour and other similar villages/regions/countries have high rates of child labour. In this way, it may be possible to identify “non-poverty” determinants of child labour and based on this knowledge to devise policies and programmes to reduce child labour without waiting decades for economic development and reductions in poverty.

_Restriction suggestion 10: Economic and policy determinants of child labour based on multi-level analyses of household and community data_

Multi-level analysis of household and community data enable one to understand the interplay between micro household-level determinants and meso/macro-level determinants of child labour. In this way, it is not only possible to understand household decision-making as regards work and school, but also to observe the effect community-level variables have on the household’s decisions. This is especially important information for policy-makers, since policies and programmes are generally implemented at the community level (e.g. provision of schools; launching of development programmes; building of physical infrastructure such as roads, wells and electricity; initiating targeted programmes for disadvantaged groups such as religious or ethnic minorities).

3b4. Employers and industries

Research on child labour has concentrated almost exclusively on the supply of labour, and _there is relatively little research on the demand for child labour_. Perhaps this is due to a common view that employers who use children are “evil”. According to this view, enforcement of minimum age laws is all that is necessary; there is no need for information on employers’ reasons for employing children, or the consequences for them if child labour were eliminated.

Perhaps this is due to economists and others who emphasise poverty, and the need to understand household decision-making, and the determinants of the supply of child labour. Taken to the extreme, this labour supply-oriented line of reasoning implies that the demand for
child labour is irrelevant, since children labour is part of a family survival strategy. Eliminating the demand for child labour among certain employers and industries would have no affect on the overall level of child labour; it would only cause child labour to shift from one set of employers and/or industries to another set of employers and/or industries. One often noted example of this phenomenon is the supposed movement to more hazardous work in the informal sector of female child labourers who were removed from the formal sector Bangladeshi garment industry (Stoikov, 1994).

Yet, the demand for child labour by employers and industries plays an important role in determining the level and form of child labour, as well as wage rates and employment levels for adult workers. This is especially important in determining the level of hazardous and worst forms of child labour, and labour market conditions for unskilled workers. Understanding the reasons why children are employed and its effect on industry structure and profits is important, as this information can be useful in devising effective policy interventions for eliminating child labour and especially hazardous child labour. As introductory economic textbooks stress, it is the interaction between the supply of labour and demand for labour which determines labour market conditions such as employment, unemployment and wage rates.

Second, as demonstrated in Anker et al. (1998), improved understanding of the role child labour plays in an industry’s production process, organisational structure and cost of production provides useful insights into how to influence the demand for child labour. For example, Levison et al. (1998) found that children do not provide irreplaceable skills in the carpet industry in India (as is usually assumed) and that children are not more productive than adults, and so rejected the “nimble fingers” argument as a justification for child labour. It was also found in Anker et al. (1998) that while children are usually less costly than adults, the cost advantage of children for many industries in India is small. On the other hand, it was found that child labour almost always has important non-pecuniary advantages for employers (e.g. docility, trustworthiness, healthiness), and some persons in the industry benefit greatly from the use of child labour even when the industry as a whole does not.

Third, child wage labour in many industries is concentrated in the informal sector. This often involves subcontracting and complicated production chains (Anker et al., 1998). This has important implications for the hazardousness of working conditions, and enforcement of minimum age laws.

Fourth, child labour is almost always unskilled and concentrated in labour intensive and low value-added processes, and this negatively affects capital investment, technological change and innovation (Anker et al., 1998). The availability of cheap unskilled child labour reduces unskilled wage rates and this has a knock-on effect on the return to capital investments, and therefore on its attractiveness. This means that the elimination of child labour should contribute to an increase in capital investment, productivity growth and innovation at the enterprise and industry levels. How large these efforts are likely to be depends on a number of factors, such as elasticity of the adult labour supply and available technological options.

Fifth, even in industries with substantial numbers of child labourers, there are employers who either do not use child labour or could be easily persuaded not to use child labour. Indeed, some of the earliest and most ardent supporters of child labour laws in 19th century England were employers who faced competition from cheap informal sector producers who used child labour (Cunningham, 1995). Two examples from modern day India are provided in Sharma (1998) and Ashraf (1996) for the carpet industry and Alam (1998) for the lock industry.
Progressive employers represent valuable potential allies, since they possess practical, knowledge and self-interest (as they face competition from enterprises employing children).

Sixth, child labour projects are often concerned with specific industries. This implies that the design, monitoring and evaluation of these types of projects would benefit from an improved understanding of how industries with high concentrations of child labour are structured and function. It also implies a need for objective impact assessments of industry-specific projects.

Research suggestion 11: Industry studies of industries with high concentrations of child labour

Empirical studies of industries with high concentrations of child labour could serve several important policy-relevant purposes. First, they could help identify possible workplace improvements (see research suggestion 13) — which could lead to the elimination of some forms of hazardous child labour. Second, through an improved understanding of who gains and who loses in the industry from the use of child labour, it should be possible to devise programmes to reduce the demand for child labour by identifying employers and groups of employers who would gain from the elimination of child labour. Employers with substantial capital investments and employers who use skilled and semi-skilled labour are good candidates for collaboration, since they would benefit from the elimination of child labour and reduced competition from low priced products which are produced with unskilled child labour. Even employers who use children might be approached effectively; one possibility would be to offer them alternative opportunities and/or encourage them to improve working conditions. Industry studies could also help identify the socio-economic-demographic characteristics of children who work in these industries. Armed with this information, targeted interventions to help these disadvantaged children would be easier to devise.

Industry studies could build on the methodology (including the use of enterprise surveys) described in Anker et al. (1998). Some characteristics of industries and employers which one would want to investigate include: labour cost as a percentage of total production cost; skill level of the work performed by children and adults; price elasticity of demand for products produced with child labour and availability of competing products and close substitutes; technological options, and their capital costs, which would allow the production process to be altered in a way which would eliminate work activities performed by children and/or the hazardous aspects of work performed by children; industry structure and decentralization of production through production chains; relative size and distribution of firms; number and relative size of consumers/purchasers of products; proportion of child labour in each production activity; elasticity of unskilled labour supply in local labour market and adult female labour force participation rates; wage payment system and rates of pay for children, adult men and adult women; working time over day and year.

Research suggestion 12: Impact assessments of industry-level interventions

Among the most widely known, and praised, programmes to eliminate child labour are ones where Third World employers and employers’ associations work together with international agencies and local NGOs to eliminate child labour in a particular industry. Examples include garments in Bangladesh and carpets and soccer balls in Pakistan (ILO/IPEC, 1998). These programmes provide non-formal education and partial income replacement for the removed children. There are however, reasons to assess the cost-effectiveness of these programmes as well as their replicability in other industries. They are expensive; based to a
substantial extent on foreign funding; their long-term effects are uncertain as they are time-bound and only concerned with one small age cohort; and they have only been applied in a select few industries.

Objective project appraisals are required based on empirical data which assess the impact a project has had on children and employers. It is important to document if the expected positive outcomes for children did in fact occur. First, did the children who were removed from work stop all work activities, or did they shift into other work; if a child continued to work, what did she/he do, and what were the working conditions? Second, are children better off at the end of the programme in terms of their development, health and future life prospects, including employment and future employment opportunities? Third, what happened to the level of child labour in the local area; was it permanently reduced? Were labour force participation rates of new cohorts of children reduced, so that at the end of the programme the level of child labour in the local area was below pre-programme levels. Fourthly, what happened to the industry and different types of employers? There are a number of organizational and labour market issues which could be addressed. On the labour and labour market side, the following questions are worth investigating. What happened to adult employment levels in the industry? Did adult employment increase with the elimination of child labour; did this increase on a one-to-one basis with the increase in adult employment matching the decrease in child labour? If adult employment increased, were children replaced by adult men or adult women? If women replaced children: were these women out of the labour force previously; were these women from the replaced child’s family or household? What happened to labour productivity and the production process/technology used? Did the elimination of child labour cause a shift in production techniques so that the unskilled work activities previously performed by children was eliminated or reduced? What happened to wage rates or piece rates? Did they rise along with the elimination of child labour; if so, how much did they increase, and did the size of this increase vary by the skill level of the work performed, the relative concentration of child labour in the work activity, or the availability of unskilled labour in the local labour market. On the industry and organizational side, the following questions are worth investigating. How were production costs affected? Were profits and/or enterprise survival rates affected; if so, how was this related to enterprise characteristics such as size, product type, etc? Did the production structure change; in particular, did subcontracting to informal sector enterprises increase?

Research suggestion 13: Identifying simple workplace improvements to eliminate hazardous working conditions

One way to reduce hazardous child labour would be to eliminate hazardous working conditions. Industry and enterprise-level studies of possibilities in this regard could prove valuable information. Such studies should employ qualitative methodologies such as case studies, participant observation and key informants.

3b5. Labour market

One of the main reasons for the enactment of minimum age laws in industrial countries such as the United States was the belief that child labour negatively affects labour markets (US Supreme Court, 1972). Since child labour increases the supply of labour, it was assumed that child labour reduces wage rates and/or decreases adult employment. The elimination of child labour was therefore seen as a way to reverse these effects — as a way to improve labour market conditions for adult workers. Using similar reasoning, activists in developing countries today often argue that adult unemployment could be eliminated by the elimination of child labour.
Child labour is also seen by economists as:

- Decreasing wage rates, and
- Increasing adult unemployment

Based on a theoretical model of the labour market, Basu et al. (1998) conclude that there are multiple equilibriums — a low level equilibrium with child labour (where poverty rates are high and wage rates are low), and a high level equilibrium without child labour (where incomes and wage rates are much higher). As a result according to their model, the elimination of child labour could result in win-win situation with wage rates rising to such an extent that poor households could have higher household wage income after the elimination of child labour as compared to the situation where households relied in part on income from child labour.12

Two other labour market aspects associated with child labour worth mentioning are:

- There are important feedbacks in the “other direction” — that is, labour market conditions affect the attractiveness of school and therefore the supply of child labour over the long run. Since employment opportunities and wage rates by skill level affect returns to education, labour market conditions affect the attractiveness of schooling as compared to child labour. This implies that reductions in social exclusion and labour market discrimination against women and minorities should lead to an increase in education and a reduction in child labour, since it would increase the relative attractiveness of education for women and minorities (see discussion in section 2c5 on this). Another implication is that since families are not always able to appreciate the more rapid economic growth which increased education would foster, government policies should “encourage” families to increase educational investments using incentives (e.g. improved schools, and economic support for poor families with children in school) and pressures (e.g. enforcement of compulsory school laws).

- The elimination of child wage labour should contribute to improving the distribution of income and reducing poverty and social exclusion, since the negative labour market effects of child labour are much more important for unskilled labour than for skilled workers because almost all child labour is unskilled.

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12 It is important to keep in mind that even when there are two equilibriums (a “good”, high income equilibrium without child labour; and a “bad”, low income equilibrium with child labour) as suggested by Basu et al., (1998) and it is clear that countries would be better off in the situation without child labour, it is not clear how a country should move from the undesirable equilibrium to the desirable equilibrium. Indeed, it is fair to say that the big challenge for countries is figuring out how to navigate from one equilibrium to the other.
Although it is tempting to conclude that the elimination of child labour can be justified solely on its positive macro labour market effects, further thought and consideration are required. While there can be little doubt that eliminating child wage labour would improve employment opportunities and wage rates for adults, it is not obvious by how much these would improve.\textsuperscript{13}

The remainder of this subsection discusses why the positive labour market effects associated with the elimination of child labour – while important – are not likely to be as large or pervasive as is usually assumed (and the common simple assumption that each eliminated child worker would be replaced by one adult worker is incorrect) in order to: (i) bring realism to the arguments; and (ii) indicate how the elimination of different forms of child labour are likely to have differential labour market effects. This is an area where empirical research and analysis are important and necessary.

— Whereas the total elimination of child wage labour (e.g. in Basu et al. 1998 model) would have a marked effect on wages and adult employment, marginal reductions in child wage labour (e.g. in only certain areas or industries) are unlikely to have marked labour market effects.

— The labour market effects associated with the elimination of unpaid family work and unpaid housework of children is likely to be markedly different as compared to the elimination of child wage labour. The former work activities do not enter the labour market, and so mainly affect labour markets indirectly through their affect on the household’s decision-making and time allocation. Indeed, it is possible that child family labour might enhance the productivity of adult family labour, since unpaid family work by children often complements adult work activities.

— The elimination of child wage labour may not have as large an effect on wage rates and adult unemployment as is often assumed. First, the adult labour supply is elastic. In some situations, the elimination of child wage labour would induce an increase in the adult female labour supply. An example of this is provided by garment manufacturing in Bangladesh where garment factory employees are mainly young adult women who would otherwise not be in the labour force work. Second, some self-employment of children can be eliminated and not need to be replaced by adult workers (e.g. begging, watching cars and hawking on the streets). Third, the productivity of child wage employees is often lower than that of adult workers which means that one adult worker could replace more than one child worker. Fourth, unpaid family work of children during peak agricultural periods (often during school vacations) may have little or no effect on wage rates or employment levels at the local level, but rather may have more of an effect on crop wastage and the use of migrant labour.

3b6. National economy

It should be clear from discussion in this paper that unacceptable forms of child labour (hazardous and other worst forms of child labour as well as child labour which interferes with

\textsuperscript{13} A recent econometric analysis of data for 15 Egyptian Governates found employment effects on adult employment of reductions in child labour to be insignificant statistically, relatively small in size, and to depend to some extent on the flexibility of adult wage rates (Diamond and Fayed, 1998).
school performance) are a drag on economic development, and consequently that the elimination of these types of child labour would contribute to economic development (assuming, of course, that children attend and learn in school). There are no examples of developed industrialised countries with high rates of hazardous child labour and low rates of school attendance. On the other hand, non-hazardous child labour which does not interfere with school performance does not negatively affect economic development; and, reasonably high rates of this form of child labour are observed in developed industrialised countries such as in United States, Sweden and United Kingdom where it is felt that light work teaches children responsibility and self-reliance.

_A number of reasons have been mentioned in this paper supporting the conclusion that the elimination of unacceptable forms of child labour is good for development. It is worth repeating these points, many of which deserve further research attention, in particular to objectively and empirically estimate the magnitude of these relationships._

- Elimination of hazardous and other worst forms of child labour would _reduce health costs_. This includes reductions in direct expenses for medical treatment, as well as increased productivity of caregivers and future adults.

- _Human capital would increase_ when the elimination of child labour is accompanied by increased education and knowledge, and this would help increase economic growth and development. It is now accepted that human capital (which is determined to a large extent by the education and health) is at the centre of development (Schultz, 1981; Streeten, 1995). Indeed, increased education and human capital are undoubtedly preconditions for successful development.

- _Income distribution would improve and poverty rates and social exclusion would fall_. Increased education would reduce the supply of unskilled workers which, in turn, would cause the relative wage rates of unskilled workers to rise. There would also be knock-on effects on the wage rates of unskilled workers due to increases in capital investment and labour productivity (see next point). Rising wage rates for a shrinking group of unskilled workers would help improve the distribution of income as well as decrease poverty rates and social exclusion.

- _Investment would increase_ as the incentive to substitute capital for labour would increase. Since the availability of cheap unskilled child labour discourages capital investment and innovation, the elimination of child labour would have the opposite effect. It would increase incentives for investment in physical capital, which, in turn, would help increase labour productivity and economic growth.

- _Gender equality would improve_, and this would help increase economic growth. Since girls in poor countries often receive fewer years of education as compared to boys, increased educational attainment in poor countries tends to be disproportionately greater for girls as compared to boys. There are a number of positive aspects known to be associated with increased female education and gender equity, such as reductions in fertility rates and mortality rates (Mason, 1995); changes in expenditure patterns toward more socially “desirable” expenditure patterns; and improved economic and labour market efficiency as society invests in the entire adult population and not just one-half of it.
Democratic tendencies would increase along with increased education and informed public. This would help increase economic growth (e.g. Rodrik, 1998). Political and social stability are important factors in today's interconnected global economy for attracting foreign investment, and democracy helps provide this with its nonviolent transfer of power as well as its attention to burden sharing and social welfare. Also, the openness, transparency and opposition criticism inherent in democracies help limit the continuation of wrong policies and crony capitalism.

Knowledge of rights would increase along with increases in education. This would help reduce hazardous and other worst forms of work. Better educated people are better informed of their rights and possess greater capabilities to stand up for their rights as compared to uneducated people. This would translate into fewer examples of exploitative and hazardous working conditions.

Fertility rates would fall, and this would help increase economic growth rates through the so-called demographic dividend. Fertility rates would fall for two main reasons. First, the economic value of children would decrease (Mueller, 1976), because the cost of raising children would rise as school expenses increase and children’s contributions to family income fall along with decreases in child labour. These changes would induce parents to have fewer children — i.e. parents would trade-off quantity for quality, having fewer but better educated children. The next generation of parents would have even fewer children, since they would be better educated and better educated parents are known to have fewer children (Cochrane, 1979; Jejeebhoy, 1996). The fall in fertility would cause the population growth rate to fall and the population age distribution to become more favourable to investment in both physical and human capital. This so-called “demographic dividend” would offer an opportunity for increased economic growth (Bloom and Williamson, 1997).

3b7. International economy and foreign nationals

The elimination of child labour from international trade has become an important issue on the international agenda. The United States, for example, has called on the World Trade Organisation (WTO) to introduce minimum labour standards into international trade agreements (Clinton, 1999). The international community has endorsed the ILO’s Declaration on Fundamental Principles and Rights at Work (ILO, 1998). Prominent among these minimum labour standards is the elimination of child labour.

In some ways, this emphasis on child labour and international trade is surprising. After all, children constitute a very small percentage of workers in the world who produce goods or services for export. Even a smaller percentage of the value of international trade can be

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14 One approach to estimating the number of children producing exports in the developing world would be to start with the US Department of Labour (1995) estimate that less than 5 per cent of child labourers in developing countries perform work for exports (using 2.5 per cent as a single point estimate) along with ILO estimates of the number of child labourers in the developing world (250 million). Multiplying these yields a crude estimate of 4.25 million developing country child labourers producing for export. This is only about 0.2 percent of the Third World labour force of 2151 million reported in ILO (1997) and 1.7 percent of ILO’s estimate of 250 million child labourers in developing countries.

To get an idea of how important developing country child labour is for international trade, this crude estimate of 4.25 million could be related to the total number of developing country workers producing goods or services for export. If one assumed that the percentage of developing country workers producing for export is the same as the percentage which export value-added is compared to GDP in developing countries (approximately 30 per cent according to Ghose, 2000), this implies that approximately 645 million of the 2151 million of the developing country labour force in 1995 (ILO 1997) produced for export. When this is related to the above estimate for child
attributed to child labour, since children tend to work in low value-added industries. Secondly, the work performed by children who produce for export is oftentimes not hazardous to their health or morals. Garment production in Bangladesh and soccer balls in Pakistan, two industries with high profile technical cooperation programmes to eliminate child labour, are said to be of this nature (White, 1996 and Boyden et al. 1998 for garments in Bangladesh; personal communication from Rob Jenson for soccer balls in Pakistan).

In light of the relatively unimportant role child labour, and especially hazardous and other worst forms of child labour, plays in international trade, it is appropriate to speculate on why the elimination of child labour has become an important international trade issue and in the process draw out policy implications. The remainder of this subsection is devoted to such a discussion.

labourers producing for export, it implies that less than 1.0 per cent of all developing country workers producing goods and services for export (to other developing countries as well as to developed countries) are children.

Obviously, the above estimates are crude and can be severely criticized. The real percentages could be much higher or much lower. One point though is clear, even if the true percentage were twice or thrice as high — child labour plays a minor part of international trade.
Since child labour in international trade is emphasised mainly by industrialised countries, it is best to start with the reasons for concern in industrial countries, which in my opinion can be traced in large part to two phenomenon. First, international trade has engendered fear and insecurity among industrialised country workers and citizens.¹⁵ Many fear that they will lose their job to low wage competitors in the developing world; many fear that beggar-thy-neighbour competitive forces will reduce labour standards in industrialised countries in a race to the bottom. These fears and insecurities are apparently quite strong and deeply rooted, since they exist “even in the United States, with the lowest unemployment rate in a generation, and where exports accounted for 30 per cent of [American] growth until the financial crisis hit in Asia, working people strongly resist new market-opening measures” (Clinton, 1999). As a result, many people in industrialised countries feel that there should be a level playing field with minimum labour standards that are consistent with basic human decency and rights. The most widely accepted expression of this minimum set of rights at work is the recent ILO Declaration of Fundamental Principles and Rights at Work (ILO, 1998), which includes the elimination of child labour as one of its four core labour rights areas. Secondly, the media and communications revolution continually exposes people in industrialised countries to the graphic depiction of abused children working in unacceptable conditions in developing countries. In the light of the above two factors, it is, therefore, hardly surprising that ordinary people in industrialised countries feel compassion for unfortunate working children in poor countries and do not want to contribute to their exploitation and abuse by purchasing Third World products made by these children.

It is only to be expected that industrialised country governments would respond to their citizens’ strong feelings, since they are democracies where opinions of ordinary citizens count at the ballot box. One way for industrialised country governments, which want to maintain the wealth creating effects of the international trading system, to get support for international trade is to emphasize fairness issues such as minimum labour standards, including the elimination of child labour (Clinton, 1999).

Ordinary citizens in industrialised counties are not only voters, they are also consumers as well as forces in their own right through voluntary and other groups. In addition to worrying about losing jobs and worsening social protection and working conditions, many people in industrialised countries are genuinely concerned about the welfare of working children in poor countries. Some provide money to NGOs. Many support the use of tax revenues for this purpose through the funding of programmes such as ILO’s IPEC. Many consumers boycott products and companies which use child labour.

Multinational and industrial country companies with extensive networks of Third World suppliers and subcontractors naturally react to the demands and desires of consumers.¹⁶ They do not want to lose customers. But more is at stake than lost sales of selected products. Much more important is the possible loss of a company’s good name or image. This could be devastating. For this reason, an increasing number of industrialised country companies are attempting to protect themselves from adverse publicity, and therefore loss of reputation, by adopting company codes of conduct which stipulate minimum working conditions (Hilowitz, 1998; ILO, 1998).

¹⁵ Recent opinion polls in the United States indicate that 58 per cent of Americans agree with the statement that foreign trade “is bad for the US economy because cheap imports hurt wages”. Only 32 per cent of Americans feel that trade is “good for the US economy; it creates foreign demand, economic growth and jobs” (Reich, 1999).

¹⁶ Consumer concern with company production and labour policy in Third World countries is illustrated by a 1997 CAFOD/MORI poll in the UK where 92 per cent of respondents believed that British firms should demand minimum labour standards from their Third World suppliers (cited in Freeman, 1998).
1999; US Department of Labor, 1998). These codes cover their own factories as well as factories in developing countries which supply them with products for sale. The prohibition of child labour is a common feature of company codes of conduct.

In contrast to the importance which industrialised country citizens, consumers, companies and governments attach to the need to eliminate child labour from international trade, most developing country citizens, companies and governments do not see this as a major problem. They refer to the fact that relatively few children work in export sectors and that this work is often not hazardous. In light of this, many in the developing world attribute ulterior motives to industrialised country interest in the issue of child labour in international trade; many see it as an excuse to promote protectionism against their products. Despite this, many Third World companies and governments cooperate in efforts to eliminate child labour from exports, in part because it is in their own interest to respond to the strong feelings in industrialised countries.

What does the above imply for child labour and trade policy? First, it is important to recognise that the issue of child labour in international trade is unlikely to disappear. This means that the use of child labour in international trade has to be addressed. Pressure from concerned citizens of democratic industrialised countries are likely to ensure this. It makes little difference that it represents only a minor part of the overall child labour problem, and does not represent a major trade disadvantage against industrialised countries. While this does not imply that trade sanctions or a social clause for trade are required, it does imply that increased efforts are required to reduce, and eventually eliminate, child labour from international trade.

Second, persons in both industrialised and developing countries need to be better informed and educated on this issue. In developing countries, people need to appreciate the strong feelings and genuine concerns in industrialised countries about child labour. They need to realise that there is a genuine humanitarian concern; after all, there is not a great deal of competition between industrialised and developing countries in products where child labour is common.

Persons in industrialised countries need to be better informed about the true dimensions of the problem as well the causes and consequences of child labour. Better statistics would help; in particular less inflated child labour estimates are needed, as are estimates which differentiate between hazardous and non-hazardous child labour in export production and non-export production. There also needs to be increased recognition in industrialised countries that removing children from certain factories or industries would not solve the child labour problem, nor would this necessarily be in these children’s best interest. There has been progress in this respect in recent years in that some high profile programmes which have removed children from export industries (e.g. soccer balls in Pakistan and garments in Bangladesh) have also provided partial income support and non-formal education for these children — although unfortunately, there are no objective assessments of the impacts these projects have had on the lives of the removed children, or on the level of child labour in the area/country after a few years’ time. This improved recognition of the need to help the removed children is a big step forward, but it is not enough. There also needs to be increased recognition in industrialised countries regarding the need to eliminate child labour in general, especially all hazardous and other worst forms of child labour, and not just child labour in export industries.

Third, the issue of child labour in international trade should be approached in a thoughtful and comprehensive manner, in order to ensure that there are welfare gains in both developing and developed countries. For this to occur, governments, NGOs and employers in both developing and developed countries need to cooperate; trade linkages and sanctions are
not required, and could prove counterproductive. The First World should increase the amount of resources it transfers to the Third World for eliminating child labour. Given the concern in industrialised countries for disadvantaged working children in poor countries, welfare in both industrialised and developing countries would increase if resources were transferred from industrialised to developing countries to deal with this problem (Freeman, 1998). Third World governments as well as international institutions such as ILO, UNDP, and World Bank should reemphasise and rededicate themselves to a poverty-oriented and human capital-oriented development strategy which emphasises education and human capital — where childhood (and child labour, education and child development) is seen within a life course perspective. Employers and companies in both the developing and developed world should cooperate as both would benefit from the elimination of child labour from export production. Third World companies would ensure continued entry to First World markets, while First World companies would protect their reputation. In these efforts, all parties should be realistic, and warn against ensuring 100 per cent compliance in the elimination of all child labour from company factories and subcontractors. First World companies might, for example, consider innovative approaches, such as accompanying good faith efforts to eliminate child labour with the funding of separate programmes to assist communities with high concentrations of child labour (such as in the provision of quality schools). A new paradigm could be constructed built on a partnership between industry and civil society.

4. Conclusions

What does the framework presented in this paper imply for Third World governments? What does it imply for international organisations with child labour programmes, such as ILO, UNICEF and the World Bank? What should be the priorities of child labour programmes? Should child labour issues be addressed in a separate child labour programme, or integrated into the work of regular programmes?

The framework and discussion contained in this paper implies that a two-pronged approach to child labour is warranted. Elimination of hazardous and worst forms of child labour should be addressed within a separate child labour programme, while elimination of non-hazardous and other worst forms of child labour should be mostly integrated into the regular work of ongoing programmes, departments and ministries.

A separate child labour programme which focussed on eliminating hazardous and other worst forms of child labour would have a clear focus (protection of children) and would receive widespread support. There is already an international consensus on this as indicated by the 1999 ILO Convention on Worst Forms of Child Labour. Simply put, hazardous and other worst forms of child labour are not tolerable in the 21st century. Such a programme would have an achievable goal, since hazardous and other worst forms of child labour constitutes a distinct minority of child labour in the world in low income countries (Somavia, 1999).

Even though protection of children would be the main objective of a separate child labour programme which focussed on eliminating hazardous and other worst forms of child labour, to be effective, programme activities would need to seriously address the economic costs and benefits of child labour as discussed in this paper, such as the following:
Poverty and poor children’s need for income would have to be addressed. If poor children work as part of a family survival strategy, as generally accepted, eliminating hazardous child labour from one enterprise, occupation or industry, or even from all large factories, would not eliminate hazardous child labour. Many poor children would continue to work in less visible parts of the economy in the informal sector where working conditions are often hazardous. This implies that programme activities should utilize economic incentives for families and children, including for example: income transfers to poor households to replace part of the income lost from the child’s eliminated work, provision of non-hazardous work for adult family members, and encouragement of school attendance through stipends.

Availability and quality of schools should be stressed. Besides being children’s best alternative to work, school attendance is necessary if hazardous and other worst forms of child labour are to be eliminated and to remain eliminated over the long run. First of all, poor countries do not have the necessary resources to be able to identify, monitor and assist financially all children who do worst or hazardous work to attend school, although middle income countries may have the required resources. Second, many children who are “saved” from hazardous work are likely to move to other, less visible hazardous work in the informal sector unless they receive sufficient income support and a viable and valuable school alternative. Thirdly, even when “rehabilitated” children attend school instead of transferring to other hazardous work, child labour is not necessarily eliminated from similar poor families and communities in the future, since there will be new cohorts of children growing up who would be just as prone as before to taking up hazardous work in less visible parts of the informal sector. Fourth, high quality schools need to become widely available so that this alternative to child labour is appealing and valuable to poor children and families which would have to sacrifice to enable their children to attend school. Finally, in the long run, increased education levels should stimulate economic development, and rising income levels will help reduce hazardous child labour.

Efforts are needed to reduce the demand for hazardous and other worst forms of child labour. The level and extent of hazardous and other worst forms of child labour in a country is determined to a large extent by employers and traditions, since they establish working conditions as well as their acceptability. This implies that child labour programmes focussing on hazardous and other worst forms of child labour should work with employers, employer organisations and community leaders to eliminate hazardous working conditions. To accomplish this, it is necessary to improve our understanding of the costs and benefits of child labour and the reasons for hazardous working conditions from the viewpoint of different actors and institutions. This type of information should make it possible to devise effective awareness-raising activities about hazardous working conditions among employers, community leaders and workers, suggest improvements to working conditions to eliminate hazards, enlist the support of progressive employers, and increase pressure on those who profit from hazardous child labour. Child labour programmes should be concerned with hazardous child labour in all of its guises, including hazardous work performed in family settings, which often occurs out of ignorance or accepted tradition. Finally, child labour programmes should collaborate closely with occupational health and safety programmes, since in the 21st Century hazardous working conditions should be unacceptable for all workers, adult and child alike.
Separate child labour programmes should also concern themselves with some selected forms of non-hazardous child labour. An argument can be made to include some forms of non-hazardous child labour in programmes which focus on hazardous and other worst forms of child labour. This paper has argued that this should include children working in export production (whether or not the work is hazardous) because of its importance to the international policy debate. A case can also be made for including children working full-time in non-hazardous wage employment, because it is clear that such work precludes school attendance and negatively impacts on labour market conditions.

Improved information on hazardous and other worst forms of child labour is required. Reasonably accurate estimates of hazardous and other worst forms of child labour are needed for targeting and monitoring progress. As discussed in section 2, considerable methodological work and empirical analyses are required on how to collect policy-relevant and accurate information using child labour surveys. At the same time it is important to recognise that there are limits to the usefulness of (national) surveys for measuring and understanding hazardous and other worst forms of child labour. The illegal and immoral nature of hazardous and especially other worst forms of child labour means that these activities tend to go unreported when a typical structured survey questionnaire is used. Furthermore because hazardous child labour is often clustered geographically (in particular industries, occupations or areas), national sample surveys are subject to considerable sampling error in the measurement of hazardous and other worst forms of child labour. These difficulties with national sample surveys imply the need for complementary and alternative estimates of hazardous and other worst forms of child labour in occupations and industries with high concentrations using different estimation techniques based on, for example, key informants and other rapid assessment techniques, qualitative care studies, industry data, enterprise surveys and focussed household surveys.

Turning now to implications for programmes and policies to eliminate non-hazardous child labour. Activities to eliminate non-hazardous child labour should, for the most part, be integrated — i.e. mainstreamed — into regular ongoing programmes of national governments and international organisations.

Magnitude of the phenomenon is too great for a separate child labour programme to address effectively. With world estimates of non-hazardous child labour in the hundreds of millions, it is obvious that separate child labour programmes cannot garner the enormous resources required to deal with the problem. This means that separate child labour programmes can only scratch the surface, and so argues for integration and mainstreaming of less egregious non-hazardous forms of child labour.

Non-hazardous child labour can sometimes be good for children and their development without affecting school performance. It is a fact that school and work can be compatible and that many school children engage in non-hazardous work in both industrialised and developed countries. Non-hazardous work can teach children, for example, responsibility and reliability and therefore can be beneficial to their development (as long as it is not so long as to interfere with school attendance and/or performance). For this reason, many people in both developed and developing countries feel that there is nothing wrong with non-hazardous child labour and even that it can be beneficial for children. In light of this situation, it is important for child labour programmes which focus on hazardous and other worst forms of child labour to clearly indicate that they...
are not concerned with most of the non-hazardous child labour found in the world. This should include avoidance of the typical practice of inflating child labour estimates by including all forms of child labour.

Human capital formation and schooling are critically important for promoting economic development and reducing poverty and social exclusion. The elimination of non-hazardous child labour which interferes with school performance and/or depresses labour market conditions is much too important to be ghettoised in a separate child labour programme. Rather, it should be a central focus of development and social policy. To accomplish this, emphasis should be on schools and school performance and increasing the attractiveness of the school option (e.g. increasing availability and quality and reducing cost), and not on the elimination of non-hazardous work and minimum age laws. Poor families in poor countries are willing to sacrifice to enable their children to attend school when schools are available nearby and of high quality.

Elimination of non-hazardous child labour should be approached within a life course perspective and be at the centre of a poverty-oriented approach to development in order to promote children’s best interest. Children learn in various ways, from formal education and acquiring knowledge in school, as well as from life experiences and informal training outside of school (which may include work). Problems arise with non-hazardous child labour when it interferes with a child’s ability to learn in school. This possibility should be addressed using a holistic life course perspective, since whether or not non-hazardous work is bad for children depends on the context which a child is in and the options available to the child (e.g. family’s poverty and its need for income; nature of child’s work and whether it can be combined with school; availability and attractiveness of the school option for poor families). In addition over the long run, increased school attendance would reduce poverty rates and social exclusion and would help increase economic growth and improve labour market conditions, especially for unskilled workers. This means that policy-makers should stress education and anti-poverty programmes which target families with school age children in efforts to increase school attendance.

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17 There are also major practical difficulties distinguishing between different forms of non-hazardous child labour in terms of their negative effect on school attendance or performance, since it is the total number of work-hours for all work activities taken together rather than for each work activity separately, which is important when considering possible interference with school. This argues for approaching the problem mainly from promotion of school rather than from prevention of non-hazardous child labour.
Bibliography


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